## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of	Jose J. Amador	)
Serial No.:	Unknown	
Filed:	Herewith	
Title:	Hypothesis Support Mechanism	)
	For Mid-Level Visual Pattern	)
	Recognition	)

United States Patent Office Attn: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to the requirements of 37 CFR 1.97 and 1.98, applicants hereby request that the references listed in the attached Form PTO/SB/08A be considered and made of record in the above-identified application. Applicants also respectfully draw the Examiner's attention to the two Akio Kimur papers listed on Page 2 no copies of which were available.

Respectfully Submitted,

Randall M. Heald NASA Patent Attorney Registration No. 28,561

Date: Dec 18,2003

Mailing Address:

NASA, John F. Kennedy Space Center

Mail Code: CC-A

Kennedy Space Center, FL 32899 Telephone No.: (407) 867-7214

PTO/SB/08A (08-03) Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

KSC-12394

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete If Known Substitute for form 1449/PTO Application Number Unknown Filing Date Herewith INFORMATION DISCLOSURE First Named Inventor Jose J. Amador STATEMENT BY APPLICANT Art Unit Unknown (Use as many sheets as necessary) Examiner Name Unknown

Sheet 1

Attorney Docket Number

U. S. PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (F Intown)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevan Figures Appear		
		<sup>US-</sup> 6324299		Sarachik, et al			
		<sup>US-</sup> 6252986		Chang			
		<sup>US-</sup> 6173066		Peurach			
		<sup>US-</sup> 6026189		Greenspan			
	l."	<sup>US-</sup> 6009198		Syeda-Mahmood			
	Ĺ	<sup>US-</sup> 3069654		Hough			
_		us- 5828769		Burns			
		us- 2002/0057838 A	05/16/2002	Steger			
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					
		US-					

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	П	
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	1€	
			ł				

Examiner	Date	
Signature	Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>8</sup>Applicant is to place a check mark here if English language Translation is attached.

Trainstation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPT. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND T : Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (08-03)

Approved for use through 07/31/2006. OMB 0851-0031 U.S. Patent and Tredemark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO				e required to respond to a collection of information unless it contains a valid OMB control number.  Complete if Known		
Oubside	10 10 10 11 17 17 10			Application Number	Unknown	
INF	ORMATION	DIS	CLOSURE	Filing Date	Herewith	
STA	TEMENT E	BY A	PPLICANT	First Named Inventor	Jose J. Amador	
	(Use as many she			Art Unit	Unknown	
	(Use as many sne	HELD GR L	ecessary)	Examiner Name	Unknown	
Sheet	2	of	2	Attorney Docket Number	KSC-12394	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		ISO, JIANG et al., "A fast approach to the detection and correction of skew documents," Pattern Recognition Letters, Vol 18, pp. 675-686 (1997)	
		AVANINDRA et al., "Robust detection of skew in documented images," IEEE Trans. Image Processing, Vol. 6, pp. 344-349, February 1997.	
		WALLACK AND MAOCHA, Robust Algorithms for Object Localizaiton. International Journal of Computer Vision, 27(3):243-262, 1998.	
		AKIO KIMURA and TAKASHI WATANABE., "An Extension of the Generalized Hough Transform to Realize Affine-Invariant Two-dimensional(2D) Shape Detection" IEEE 2002	
		KIMURA, AKIO, "Generalized Hough Transform to be Extended as an Affine-invariant Detector of Arbitary Shapes," IEICE, Vol. J84-D-II, No.5 2001. (in Japanese)	
		KIMURA, AKIO, "Fast Generalized Hough Transform that Improves its Robustness of Shape Detection," IEICE, Vol. J83-D-II, No. 5, 2000. (in Japanese)	

Examiner	Date	
Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of Information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.